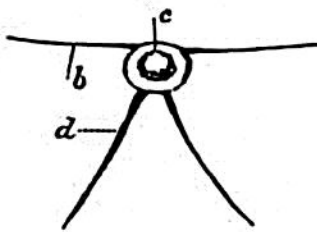


The three component walls of the disk are excessively thin, making it very difficult, even with a magnifying power of five hundred diameters, to recognize any thing more than a thick, dark line, as the representative of the thickness of each (Pl. XIX. *Figs.* 16, $g^1 h^2 o o^1$, and 17, $a c$, wood-cuts 18, $b d$, and 19, $a b c, a' b^1 c'$).

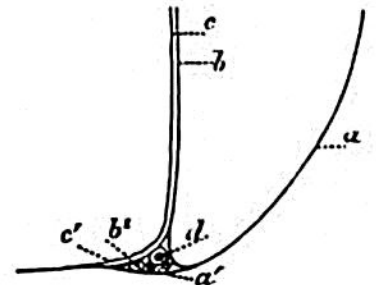
Fig. 18.



Sectional view of a radiating tube (*c*), and the adjoining middle (*b*) and innermost (*d*) walls.

For a short distance before the middle (Pl. XIX. *Figs.* 15, h^2 , and 16, h^2) and innermost walls (g^1) join the proboscis, they become more easily discernible, from an increase in thickness, which reaches its maximum ($g h$) in the organ just mentioned. The middle wall is quite thick where it becomes an integral part of the radiating tubes (Pl. XIX. *Figs.* 16, e , and

Fig. 19.



Vertical section of the edge of the bell.

$a a'$ outer wall. — $b b^1$ middle wall. — $c c'$ innermost wall. — d circular tube.

17, b , wood-cut 18 c). Just before the medusa frees itself, and whilst confined within the close embrace of the horny film (Pl. XIX. *Fig.* 14. e), the unexpanded outer (a), middle (b), and innermost walls (c), exhibit considerable thickness, allowing the component cells ($a^1 c^2$) of the outer and inner ones to be recognized; but the moment these walls are liberated from restraint, they take on the conditions described above. The innermost wall is perfectly free from the middle wall, except at the radiating tubes and the four intermediate points. This becomes apparent when the disk is contracted, at the time the animal is dying. Then this wall shrinks from the middle one, between the points of attachment, and, according to the degree of contraction, forms a figure with eight angles, more or less sharply defined (Pl. XVIII. *Figs.* 16, a , 17, e , and 18). The bulbous swelling (Pl. XVIII. *Figs.* 15^a and 17; Pl. XIX. *Figs.* 17, a^1 , and 18, c) on the under side, at the base of the tentacles, and the eyes (Pl. XIX. *Figs.* 17, d , 18, a , and 19, a), are, proportionally, from three to four times as large as in the full-grown medusa. When seen in profile, either from above or laterally, it becomes evident that the eyes occupy the whole thickness of the outer wall of the tentacle, and that they have a truncated, conical shape, with the narrower end turned inwards (Pl. XIX. *Figs.* 17, d , and 19, a).

As to a nervous system, it has not been possible to detect the least signs of a structure indicating its presence. When the innermost wall (Pl. XIX. *Figs.* 16. g^1 , and 17, c) is seen in profile, along the radiating tubes and at the four intermediate points, its thickness resembles a thin cord, which might be easily mistaken for a nervous thread. The most intimate structure, the cells (Pl. XIX. *Fig.* 13, b), of the innermost wall, along the radiating tubes, do not differ from those on each side (a); all are alike excessively transparent, and round. When the animal is contracted in the manner described above, the innermost wall, at its eight points